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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,784	01/26/2001	Hartmut Breuninger	1998CH017	5014
25255	7590	09/29/2004	EXAMINER	
CLARIANT CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 4000 MONROE ROAD CHARLOTTE, NC 28205			ELHILO, EISA B	
			ART UNIT	PAPER NUMBER
			1751	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/744,784	Applicant(s) BREUNINGER ET AL.	
	Examiner Eisa B Elhilo	Art Unit 1751	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 June 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

1 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/8/2004 has been entered.

2 Claims 12 – 37 are pending in this application.

#### *Claim Objections*

3 Claim 37 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Because claim 37 recites the limitation “at least one or more formulating additive comprises (F1)” Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

#### *Claim Rejections - 35 USC § 103*

4 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kayane et al. (US 4,548,612) in view of Yatake (US 5,560,770).

Kayane (US, 612) teaches an aqueous reactive dye composition comprising a halo-triazine compounds of the formula (2) having a  $\beta$ -sulfatoethylsulfonyl and chloro substituent

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groups as claimed in claims 12, 23-24 and 36 (see col. 7, formula (2)). The dyeing composition comprises 5 part (percentage) of the dye compound which presented in a percentage amount within the claimed ranges as claimed in claim 15, 5% of urea (F1) as claimed in claims 13, 14 and 28, thickener as claimed in claim 19 and 38% of water (see col. 17, example 15) and has a pH in the range of 4,5 to 6.5 which falls within the claimed range as claimed in claim 30 (see col. 3, lines 32-33). The reactive dye composition is used for dyeing after having been stored for several days to several months as claimed in claims 32-35 (see col. 1, lines 10-12). Kayane further, teaches a process for the production of a dyeing composition (printing paste) wherein the composition may be prepared in a conventional manner using component (F) along with the conventional printing assistants such as urea as claimed in claims 16, 31 and 37 (see col. 5, lines 1-5).

Although Kayane et al. (US, 612) teaches an aqueous reactive dye composition comprising a halo-triazine compounds of the formula (2) having a  $\beta$ -sulfatoethylsulfonyl and chloro substituent groups, the reference does not teach or disclose the biuret component as claimed. However, Kayane teaches a dyeing composition comprising urea component as a printing assistant (see col. 5, lines 2-4).

Yatake (US' 770) teaches in analogous art an ink composition comprising urea and/or urea derivatives such as biurea, biuret or tetramethylurea in the amount of 2 to 20% by weight, which is overlapped with the claimed ranges. It is further taught by Yatake (US' 770) that the addition of the urea and/or urea derivatives to the composition improve print density and prevent clogging of ink delivery ports (see col. 3, lines 44-55). Yatake (US' 770) also teaches a

composition comprising antiseptic agents (F6) and 5% of diethylene glycol mono-t-butyl ether (F2) as claimed in claims 27 and 29 (see col. 5, lines 9-10 and col. 8, Example A8).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the primary reference of Kayane by incorporating the biuret component, antiseptic agents (F6) and the diethylene glycol mono-t-butyl ether (F2) as taught by Yatake to make such a composition with a reasonable expectation of success. Such a modification would be obvious because the primary reference of Kayane et al. (US' 612), clearly teaches and suggests the use of urea component in the dyeing composition as a conventional printing assistant (see col. 5, lines 3-5). Yatake (US' 770) as a secondary reference teaches the equivalence between urea and biuret components, and, thus, a person of an ordinary skill in the art would be motivated to replace the urea component of Kayane (US' 612) with the biuret component as taught by Yatake (US' 770) to make such a composition with a reasonable expectation of success to improve print density and prevent clogging of ink delivery ports and further to incorporate the additives of antiseptic agents (F6) and the diethylene glycol mono-t-butyl ether (F2) as taught by Yatake (US' 770) for the purpose of improving various properties of the composition and would expect such a composition to have similar properties to those claimed, absent unexpected results.

With respect to claim 20, it would have been obvious to one having ordinary skill in the art at the time of the invention to formulate a stock solution because Kayane teaches dyeing composition comprising similar dyeing ingredients in the claimed amount wherein the composition has a pH value that falls within the claimed range and therefore, the composition should have similar concentration to those claimed.

With regards to claims 17-18, 21-22 and 25, Kayant teaches a method for dyeing or printing fiber materials, wherein the method comprises steps similar to those claimed such as contacting the fiber materials with the dye composition as described above (see col. 2, lines 9-12), and, thus, a person of an ordinary skill in the art would expect such a process to have similar properties to those claimed, absent unexpected results.

With respect to claim 26, it would have been obvious to one having ordinary skill in the art at the time of the invention to make a dyeing composition having viscosity similar to those claimed because the primary reference teaches an aqueous dyeing composition comprising dyeing ingredients in the claimed amount which are similar to the claimed dyeing ingredients and, thus, would be expected to have similar properties including viscosity.

With respect to claim 29, it would have been obvious to one having ordinary skill in the art at the time of the invention to make such a dyeing composition by optimizing the dyeing ingredients of the composition in order to get the maximum effective amounts of these ingredients in the composition with a reasonable expectation of success for improving the various properties of the composition.

***Response to Applicant's Arguments***

3 Applicant's arguments filed June 8, 2004 have been fully considered but they are not persuasive.

With respect to the rejection based upon Kayane (US' 612) in view of Yatake (US' 770), Applicant argues that Kayane describe the production of a dry dye composition that does not comprise urea and there is no description or suggestion of any liquid reactive dye composition as

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claimed. The applicant also argues that there is no motivation to combine the teachings of the references.

The examiner respectfully, disagrees with the above arguments because Kayane (US' 612) as primary reference teaches an aqueous dyeing composition (see col. 12, Example 8, lines 67-68). The primary reference also teaches that the aqueous dyeing composition is obtained by dissolving the dyeing ingredients including urea in water (see cols. 17 and 18, Examples 16-20) and Yatake as a secondary reference teaches the equivalence between urea and biurea in an aqueous dyeing composition (see col. 3, lines 44-50), and, therefore, there is a motivation to combine the teachings of the references by substituting the urea component in the aqueous composition of Kayane with the biurea component in the aqueous composition of Katake to make the claimed composition. Therefore, the prima facie case of obviousness has been established.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eisa Elhilo  
Patent Examiner  
Art Unit 1751

September 22, 2004